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★ DEC - 3 1928 ★

Tuesday, December 4, 1928
U. S. Department of Agriculture

1.9
In 30s
OUTDOORS WITH THE SCIENTIST

NOT FOR PUBLICATION

READING TIME: 10 minutes.

ANNOUNCEMENT: Interest in trapping for furs isn't limited to farm boys and Alaskans. You'd be surprised how much trapping is done by people you'd never take to be trappers. But maybe you won't be so surprised after you've heard this OUTDOORS WITH THE SCIENTIST radio chat which has been prepared by fur specialists in the United States Department of Agriculture for Station _____'s radio listeners. A conversation between a fur expert and a trapper brings out the arguments a fur-bearer itself might tell us in favor of conservation with use. The talk is called Trapping for Furs.

--ooOoo--

Well, I hadn't had much luck along my trap lines that day. Perhaps the cold, gray weather had kept the little fur-bearing rascals in. At any rate, I was pretty much discouraged. Half a day making the rounds through the snow and cold! And all I had to show for it was five or six muskrat and a couple of skunk pelts. Not so bad for one day, I hear you say. Ah, but I hadn't visited the traps for three days.

I collected what the traps had snared. Baited up again. Then went home.

When I got there, I found my friend, Harry Le June waiting for me. He was sitting on an empty box in my fur shed, examining a small stack of skins while he waited. Harry's a specialist in furs and knows the whole business.

I shoved the door open with my snow-soft boot and walked in.

"Ah," said Harry -- "Here comes Jim, the big trapper, himself. What luck, Jim?"

"None at all," I said sourly.

"But you must cheer up, Jim," said Harry Le June. "You must remember that there are half a million other trappers in these United States today. Perhaps the animals that furnish our fur are getting afraid of half a million trappers. Perhaps the other half million trappers are also having what you call hard luck."

"How does that help me?" I complained.

"But not at all, Jim," said Harry. "Too many trappers, maybe. And hardly enough of the hunted. Milady, she wears the fur. All miladies wear the furs. Big demand. Supply growing smaller. Perhaps not enough protection of the fur bearers," said Harry, my friend, who has made a life-long study of the fur industry.

"Here," he said, "sit down, Jim. While you put your skins on the frames, let me tell you the story of the fur animal and the trapper. You know a good part of it, of course, already."

"Well," said I, "guess there's not much else for me to do, so shoot."

"Twenty-five years ago," Harry began, "the annual fur catch in the United States was worth about \$25,000,000. That is a lot of money, Jim -- but wait. Today the catch is worth about \$60,000,000. But that means something. Maybe it means this: The raw-fur catch last season, Jim, was 20 per cent less than the year before. In the past, the decrease was in the more valuable pelts, such as marten, fisher, milk and beaver. Now the decrease is also in the staples, such as muskrat and raccoon. Perhaps you have noticed the decrease in muskrat, Jim," said Harry slyly.

"I have," said I.

"Many years ago," Harry continued, "fur trapping and trading was a small industry, but today! Ah! It is one of the largest and most important of industries. It is the oldest branch of commerce. It is the most far-flung branch of commerce. Trapping goes on in places where there is not even farming. In every state in the United States there is trapping. In every country in the world. The fur trader is the adventurer of today. He explores the farthese corners of the earth. He stakes his life against men who take delight in matching their strength, endurance, and cunning against raw nature, dumb beasts, and uncouth savages."

I had forgotten to prepare my skins. I was that interested in Harry's yarn!

He went on talking. There was a dream in his eyes. "Furs from Japan and the near-by islands move Eastward through Seattle and San Francisco to the markets. Korean fur, Manchurian fur, Chinese fur, find their way to the Western world by traveling eastward through Japan to the Pacific ports of America. Fur comes in from the mountains, dark forests, deserts, the sea, the prairie, drawn by locomotives -- in donkey and camel caravans -- piled in slow-moving bullock carts -- packed on dog sleds -- carried on the backs and heads of dark-skinned and yellow-skinned porters. But the fur comes in, Jim. Oh, you must not think that America gets all her fur from America! But no.

"And such wonderful furs we get, too. It is very pleasing to know of the wonderful progress that has come into the fur business. The raw pelt is the only thing that resembles the fur business of the days of Todd, Ashley, Chouteau, Perrot, and the thousands of other early trappers. Our modern furs, Jim, are carefully chosen, cut with skill, and fitted to make artistic designs to sell to milady."

"Sure. I know that," I broke in. "But what I want to know is how I can make more out of the business."

"Exactly, Jim," said Harry smiling. "But have patience. I am coming to that directly. This fur business with its long and romantic history is now so big and so well established that it's high time to begin to look into its future. You have had bad luck today. Maybe many others, also. What can we do about it?"

"We must have furs. Some of the fur animals make good food, too. We must have food. We want always to have wild life. The hunter wants his sports. And who am I to say no? Now, is there not a way to give the people their fur, food, and sport and still keep up a good supply of the animals that give us all three? I ask you."

"Sure, quit hunting 'em for a while. Don't kill so many of 'em. Don't poison their waters and spear 'em and blast them out of their homes with powder," I said.

"Yes, but that is not all," Harry declared, as he smoothed the hair on one of my pelts. "We have a hard problem. We have the problem of satisfying almost everybody, do you see? Let me tell you! A skunk kills a farmer's chickens. He says all skunks are chicken killers, therefore they are 'vermin' and should all be killed off. He does not know that chicken-killing skunks, raccoons, and opossums are not common. Some men go hunting the raccoon for sport. A skunk breaks up their party. And so they say all skunks break up all raccoon hunting parties. Hence, skunks should be killed.

"Last year, they tell me, some minks were led astray and made their homes on a game farm. They killed a large number of pheasants. And so that State undertook to kill off all minks in the State. They put a State-wide open season for one year on minks. But how often do minks kill pheasants, Jim? Probably seldom. Certainly, fur animals are out of place on game-bird farms and in henyards. And when it is decided that fur animals are dangerous 'vermin', steps should be taken to control them. But usually fur animals are not dangerous 'vermin' and we should protect them."

"How?" I asked.

"That is the question I wanted," said Harry. "Now let us see how our wild-life laws can be improved. For these laws protect the fur and game animals.

"First, the fur laws should always state exactly the names of the fur-bearers that are to be protected. The term 'all others' is very bad. It allows too many men to have opinions on the matter.

"Second, animals whose pelts are more valuable than their meat and whose pelts are likely to be damaged when taken for sport, should be protected as fur-bearers.

"Third, the State should charge a license fee for hunting and taking furs and require a report on the catch. It will then know how much of its wealth in furs is taken every year and will know better how to conserve this wealth.

"Fourth, smoking out, digging out, poisoning either by gas or bait, giggering, or destroying nests or dens should be absolutely prohibited.

"Fifth, most open seasons are so long that it is possible to trap before the pelts are prime in the fall -- and after breeding starts in the spring. A three months' open season for all fur bearing animals in all states is plenty.

"Sixth, the terms 'prime' and 'unprime' are confusing. They should not be used in fur laws. The words 'legal' and 'illegal' should be substituted for them.

"Seventh, there should be a strict dog tax in every state. There is little hope for conserving game and fur animals unless a dog law is enforced. The roaming dog is very destructive to fur and game animals.

"And, last of all, Jim, I would say that the ones who frame fur laws should be fair and open-minded. They should not be swayed by one interest at the expense of another. They should give as much consideration to trappers as to sportsmen."

"That certainly sounds fine to me, Harry," said I as I began to stretch skins on the frames. "You believe in using the fur animals at the same time you protect them."

"Exactly," said Harry, as he arose and went to the window to watch the snow falling outdoors. "I believe in conservation with use."

--ooOoo--

ANNOUNCEMENT: That concludes this feature from the U. S. Department of Agriculture. You may secure information on Fur Laws for the Season 1928-'29 by sending to this Station or direct to the Department at Washington. Ask for a copy of Farmers' Bulletin 1576-F. The bulletin summarizes the measures being taken by different States to protect the fur-bearing animals of America.

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9 Im 305 OUTDOORS WITH THE SCIENTIST.

Tuesday, December 11, 1928

NOT FOR PUBLICATION

READING TIME: 10 minutes.

ANNOUNCEMENT: The Forester is on deck today to tell Station _____'s radio audience about the National Forests and Wild Life Conservation. His talk comes as this week's OUTDOORS WITH THE SCIENTIST radio chat prepared by the United States Department of Agriculture. Part of the talk deals with Shorty, a sheepherder who likes bears. But let's let the Forester tell it in his own words---

---ooOoo---

Let's begin with a true story----

The story's about a sheepherder who likes bears!

Did somebody laugh out loud? Well, sheepherders really AREN'T supposed to love bears in a big way, but Shorty does.

Shorty grazes woolies on the Bighorn National Forest under a grazing permit. Woolies are sheep, if you don't happen to know the word. Well, Shorty's a friend of the bears. It seems that he has had some acquaintance with them and he thinks that bears are charged with a lot of crimes they don't do. A cowpuncher once showed Shorty a sad sight. Four big cows lay dead on a spot no bigger than a house. The cowpuncher told Shorty that bears killed those cows. But Shorty just laughed---

"No one can tell me that a bear will do a thing like that," Shorty said. "Once in a while you'll find a killer among bears, but no bear--- killer or not--- will do a thing like that. Whenever I hear of such incidents from a cowpuncher, I put that puncher down right now as neglecting his business. Those cows were killed by some kind of poison weed. Maybe the bears ate some of the carcasses later. But that puncher made the bear the goat for his own laziness," Shorty said.

He went on to say that he has had a black bear running with his sheep for 4 summers now and hasn't suffered a single loss. He said that the sheep think no more about that bear than they do about his shepherd dogs. She looks to them just like a big black dog, anyhow. Last year the bear had a cub and Shorty said that both bear and cub got among the sheep every few days. But not one sheep was killed.

"But I'm not telling this to all my friends down in the Valley," Shorty concluded. "Because some of the boys would come up here with a 30-30. These bears are my friends."

1. The first thing I noticed when I stepped out of the car was the cold. It was a sharp contrast to the warm blanket I had been sitting under. I looked around, trying to get my bearings. The street was empty, and the buildings seemed to be made of a different material than the ones I was used to. I took a deep breath and walked towards the building that I had been told was the headquarters.

I found a small, unassuming building with a sign that read "Headquarters".

Inside, I was greeted by a man who looked like he had been through a war. He handed me a clipboard and a pen, and I filled out some papers.

After a few minutes, I was shown to a room. The room was small and cluttered, but it was clean. I sat down on the bed and looked at the clock. It was 10:00 AM. I had been told that I would be staying here for a few days. I looked at the door and then at the clock. I decided to wait.

I was sitting on the bed, looking at the clock. The door opened and a man came in. He was wearing a uniform and had a serious expression. He handed me a piece of paper and then went back out. I looked at the paper and then at the clock. It was 11:00 AM. I decided to wait.

I was sitting on the bed, looking at the clock. The door opened and a man came in. He was wearing a uniform and had a serious expression. He handed me a piece of paper and then went back out. I looked at the paper and then at the clock. It was 12:00 PM. I decided to wait.

I was sitting on the bed, looking at the clock. The door opened and a man came in. He was wearing a uniform and had a serious expression. He handed me a piece of paper and then went back out. I looked at the paper and then at the clock. It was 1:00 PM. I decided to wait.

Now, there ought to be a moral or something to that story. But it's hard to work one out of it. Bears sometimes kill sheep and sometimes they don't. Shorty's bears don't kill sheep, apparently. I guess I'd better let you pick your own moral and go on with the story...

The story has to do with Forestry and Wild Life, anyhow, and Shorty's yarn fitted into the subject so well that it just had to be told. Furthermore, sheepherders and forest rangers know as much about wild life--- wild animals and birds--- on the range as anybody. Some folks think that wild animals in the forests are something to be killed for sport or spite. The United States Forest Service looks at wild life as a national resource of great social and economic importance. It's only natural--- when the Forest Service looks at the thing that way--- for the Forest Service to do everything possible to protect wild life and conserve it for the future. The Forest Service believes that protecting wild life in the National Forests will add a lot to the recreational value of the forests. Every one who loves the woods, the great out-of-doors, loves the wild life there.

Now, maybe you're asking, "Well, what's all the shooting about? Are wild animals and birds in the National Forests in danger of being wiped out?"

Well, in one way, wild life is decreasing. There certainly aren't as many buffalo, bear, caribou, elk, antelope, and such animals in the forests of America now as there were 40 or 50 years ago. And, in order to throw some light on the question in the present, the Forest Service each year takes a game census of the National Forests. Of course this census can be nothing but an intelligent estimate of the number of game animals on a given range. You can't line up the bears and deer and mountain sheep and then count noses. But the game census is the best estimate that can be gotten on the wild-life population.

The last game census showed encouraging results. Compared with the preceding year, the census of the fiscal year 1927 showed increases in the number of all the big game animals, on the National Forests as a whole.

The latest figures rate the deer population on National Forests at about 671 thousand head--- an increase of about 65 thousand head. Elk were found to have increased by more than 10 thousand head and were found on 95 different National Forests in 15 States. There were some 7 thousand head of moose, about 1 thousand more than in the preceding year. Most of these moose are found in Alaska, Montana, Wyoming, Idaho, and Minnesota. Mountain goats and mountain sheep increased slightly. Antelope increased considerably.

The figures show, however, that there aren't many grizzly bears left on the National Forests. Leaving out Alaska, it was found that there were 814 grizzly bears still alive and kicking. It's funny about California. California is known as the Bear State and the grizzly was the emblem on its first flag. But not a single grizzly is to be found in the national forests of that State now. Most of the grizzlies are in Montana, Idaho, Colorado, Washington, Wyoming, Utah, Oregon, Arizona, and New Mexico.

According to the game census, deer are the most plentiful big game animals on the National Forests. Next in order come elk, the black or brown bear, mountain goats, mountain sheep, moose, antelope, and the grizzly bear.

Caribou is the scarcest big game animal now. Only 174 were recorded in the last census.

The forests also hold hundreds of thousands of the lesser animals that are valuable for fur or sport. Beaver, for example, are reported to be increasing in many places. The last census showed 115,600 beaver in the National Forests.

Some people think that bird refuges, game laws, and other protective measures, are established merely in the hunter's and the nature lover's interests. But these refuges and laws have another object, too. Wild life is valuable and when it's protected, it adds to the national wealth. New Hampshire, for example, figures that wild life represents to that State an annual income of 6-1/2 million dollars. Taking that figure as a starter, the total value of wild life to all the 48 States must reach an enormous sum. Flesh, fur, and feathers, you know, are worth money.

These wild animals have interesting ways. One of the forest rangers reports to the Forest Service, a surprising battle between a doe and a bobcat. If you think that does are as timid as some folks make out, listen to this---

The doe was protecting her young. A ranger in the Elk Mountain district of the Datic National Forest noticed a sudden commotion on the hillside. He stopped to investigate. Pretty soon a bobcat ran across the road right in front of the ranger. Hard on the cat's heels came a doe, stamping and snuffing. Less than 100 feet from the road, the bobcat climbed a tree. But the doe didn't take such a safe way out. She stood her ground nearby. The ranger started over to kill the bobcat, but it jumped out of the tree and ran off. As soon as the bobcat resumed its retreat, the doe promptly gave chase and treed the cat again within 50 yards. This time the ranger got over to the tree and killed the bobcat. The doe showed no fear of the ranger and he watched her for a while when she went back to the place she had come from. Pretty soon the ranger saw the doe and her fawn come out of the brush. She seemed to know that Bill, the ranger, was her friend.

Such valuable and interesting animals should be protected in all ways possible. But one of their greatest enemies, the Forest Service says, is the forest fire.

Forest fires sometimes trap game animals and destroy wild life along with every other living thing in their path. Fire-fighters now and then report that they have seen the charred remains of a deer or the seared body of a quail or sage hen that had been caught in the furnace when the fire suddenly changed its course. Fires not only kill wild animals outright--- they also destroy forage on which the animals live. A fire sweeping across the nesting grounds of grouse and other game birds in nesting season, destroys the eggs and young birds. Fire also spoils fishing. As all fishermen know, good fishing depends on clear water. When a forest is burned, the soil erosion caused by the fire fills up the streams and lakes with silt and mud and puts an end to good fishing.

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The destructive work of forest fires goes a long way. It takes a long time to grow a new forest and re-populate it with wild life on lands that have been made barren by forest fires. When a man lets a fire get started through his carelessness, he may be causing losses of timber and game that will be felt in the next generation. Game protection and forest and wild life conservation look into the future.

The Forest Service makes a business of looking into the future. Hunters, fishermen, and travelers in the National Forests can do a lot to guarantee the next generation the pleasures we are enjoying today. They can do this by guarding America's forests from fire. They can do it by wise and careful use of the forests. And they can do it by protecting wild life in so far as they are able.

--ooOoo--

ANNOUNCEMENT: That concludes today's OUTDOORS WITH THE SCIENTIST radio chat from the U. S. Department of Agriculture. Station_____ will broadcast another SCIENTIST talk next Tuesday. Beaver Habits and Beaver Culture will be the subject of the talk.

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m 3 OUTDOORS WITH THE SCIENTIST.

Tuesday, December 18, 1928.

NOT FOR PUBLICATION

ANNOUNCEMENT: Jim Steel was a trapper in his younger days and he knows a lot about that famous fur animal, the beaver. He thinks that many farmers could raise beavers right on their own farms and, in today's OUTDOORS WITH THE SCIENTIST radio chat, he's going to tell Station _____'s radio audience why. His talk comes from the Biological Survey of the United States Department of Agriculture.

---ooOoo---

"Let's take a stroll down into the meadows".

My friend, Jim Steele, was speaking. It was a bright brisk early winter afternoon. Somehow there's something in such days that brings back old times and old memories. And I guess Jim Steele has about as many of those memories as the average man. He has seen history in the making and hasn't stood back and merely watched them making it, either. In his more than three score and ten years of active life, Jim has played a big part. Just to introduce him a bit more fully to you, I'd like to mention that Steele has been a trapper and an adventurer. While he may not remember Jim Bridger, or other bold spirits who followed the lure of the fur trail out into the sunset in the early days of the American West, still Jim wasn't so far behind. As a result of his life-long occupation and of careful observation and study, Steele has learned a lot about trapping and the ways of fur animals.

So we took a little stroll down into the partly wooded marsh lands on the lower part of the farm. I happen to know that farm very well, acre by acre. You see I've lived on it a good share of my life.

I noticed Jim looking over to the right where the remains of a solid, ancient beaver dam still stand. I knew he'd make some comment on it, sooner or later.

"That looks to me like signs of beavers", said Jim.

"Yep," I said, "but you won't find any beavers on this farm today. My father, who owned this meadow at one time, said that he could remember when beavers were fairly plentiful around here. But they seem to be pretty well trapped out by now."

Steele said that such a thing was perfectly possible. He told me that beavers often work on the same dams and colony houses for several generations and that it isn't at all unusual to find some of these well-built structures lasting long after the last builder has been trapped. Then he

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turned to me with more enthusiasm than he ordinarily shows and said, "I should think you'd take advantage of this moist, wooded meadow and try beaver farming yourself. If you're successful, you could make a very decent profit out of the work."

At first I thought my friend was joking, but I should have known him better than to think he'd make a joke out of the thing he's most interested in. "Seems to me," I said, "That if the beavers have passed on in this locality, there's not much chance of getting them started again".

"I don't think you need worry about that part of it," said Steele. "At one time, beavers lived in the streams and the lake shores of practically all of North America, clear from Florida to Alaska. The Biological Survey of the United States Department of Agriculture says that very few native American animals have had a wider distribution. Few of our native animals have played a more important part in the romantic and adventurous history of North America. We could still make the beaver an important profit-producing fur animal right here in this section if we kept him under proper control and at the same time gave him good care.

"You see," Steele continued, "a large part of the original beaver range is now being used for farming and other purposes. Fields and orchards have replaced the primeval forest. It would be impossible to restore the beaver to all its old territory. But in any suitable section, beaver farming could be profitably practiced. And what's more, the beaver would do much good by helping to prevent floods and extensive soil erosion, by increasing the stream flow in dry weather, and by improving the fishing resources of many streams and lakes. In such places these interesting animals would not only enrich our forests and parks with an interesting form of wild life, but would also add greatly to the decreasing supply of valuable fur."

All that sounded very reasonable. Steele noticed that I was interested, so he continued his talk. "You know," he said, "much of the present beaver population is found in localities similar to this place right here. Localities, in other words, where the original timber has been lumbered off and the ground burned over and where thickets of aspen and pin cherry have sprung up as second growth. Most farmers can't use such land very profitably, but this land might support a large beaver population. If farmers would give the careful and detailed attention required, a small fur farm could easily prove successful. The two essentials for beaver farming are a food and a water supply. It looks to me as if you have both of those right here."

I asked my trapper friend where a man could get hold of the stock to start such a beaver farm.

"It might be hard," he said. "A serious obstacle to beaver farming is that it's hard to get breeding stock from parts of the country where the most valuable fur bearers are still native. On the other hand," he said, "it's possible to get the stock to start with. Beavers are very shy, but with proper care they are not so hard to raise as many people think. For example, a couple of beavers came to a small pond in Cascade Creek in Colorado

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and immediately began to cut willows along the bank. Beavers prefer the poplar tree for food, but they'll make use of willows and other trees and shrubs where they can't find their favorite poplars. Well, anyhow, some of the villagers along Cascade Creek wanted to kill these two beavers. Others, appreciating the interest of a beaver colony at their doors, objected, and hauled in aspens for their pets. These beavers soon became tame and would play around and eat bread and crackers within a few feet of visitors. The animals built a strong house on an island in a pond right near the band stand and evidently desired to stay as long as they were welcome. This goes to show that young beavers are easily tamed and may prove to be the best stock to start with. Even adult beavers will become tame and gentle enough to be handled by people who understand animals. With plenty of clean water, suitable food supply, and comfortable sleeping quarters, you can keep beavers on either large or small areas. The natural rate of increase in a beaver family should be a doubling of the stock each year. From 4 to 6 young is about the usual size of a litter and there's usually one litter a year."

Steele paused a minute and stood looking down at the old dam. "You'd wonder how beavers carry so much heavy material," he said. "When it comes to carrying things, beavers are surprising. When they drag wood down from the land to the water, they take hold of it with their strong incisor teeth. Then they turn their heads to one side and in this way drag heavy poles or good-sized branches. They carry a stick or small branch, between their teeth, clear of the ground. In the water, a pole or small log is usually towed by the side. The beavers fasten their teeth into the bark near the end of the log. Sometimes they'll hold the log with their arms and front claws, and swim through the water with it, using the tail as a rudder to keep them going straight.

"They use their fore-arms and hands to carry stones," my friend went on. "There are lots of stones in the average beaver dam. Stones from 5 to 6 inches in diameter, which weigh 8 or 10 pounds, are usually used. These rocks are usually brought up from the bottom of the pond. Beavers carry large arm-fuls of sticks and mud from the bottom of the pond up to the sloping sides of the dam. They walk on their hind legs, balancing their bodies with their tails."

"I'd like to know a little bit about how they build their dams, Jim," I said.

"Beavers work from the upstream side when they build their dams," Steele began. "Sticks, leaves, grass, sods, and mud are laid across the stream and are added to until the water flow is checked and the level begins to rise. As the water level rises, sticks are pushed over the top and allowed to lie crosswise on the lower slope. All this material is bound together by mud that's added to the top of the dam. The work goes on till the dam is high enough and strong enough to hold the water at the level wanted by the beavers. The ends of the dam are extended as the water rises. The animals learn about making dams by long experience and by trial and error."

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I asked Steele if beavers could be used for anything except fur. He said that the early trappers considered beaver meat, properly cooked, about the choicest delicacy their hunting brought in. The body meat has rather a gamy flavor, but if it's properly cared for and cooked, it's very good. In fact, the trappers preferred it to many other kinds, even in the early days when buffalo, elk, and deer were abundant.

"Of course," continued Jim, "the main value of beavers lies in their pelts. Beaver fur commands a good price, and promises to continue to bring good profits to trappers in the future. Personally, I think you could well afford to make quite a study of the possibilities of beaver farming, with a view to trying it out yourself."

While Steele was talking, we had been wandering into the lower meadow among the trees and along the edges of the shallow pond down there. The sun was about ready to go down and it was getting a bit cool. This reminded me that it was about time to bring in the cows. And, since John had promised to help me milk them, I didn't want to take him away from this worthy endeavor. Consequently, with a promise that I would look seriously into the matter of raising beavers for fur and meat, we returned to the house.

---ooCoo---

ANNOUNCEMENT: The U. S. Department of Agriculture has just the thing this interested farmer wants. It's Technical Bulletin 21-T, called BEAVER HABITS AND EXPERIMENTS IN BEAVER CULTURE. It gives directions for raising beavers for fur as well as much interesting reading on the habits of this valuable animal. You may direct your request for a free copy of the bulletin to Station_____.

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U. S. Department of Agriculture

OUTDOORS WITH THE SCIENTIST.

Tuesday, December 25, 1928.

NOT FOR PUBLICATION

SPEAKING TIME: 10 Minutes.

ANNOUNCEMENT: Today's OUTDOORS WITH THE SCIENTIST radio chat from the United States Department of Agriculture ought to make a good talk for Christmas Day. It's called Fox Farming and part of it goes like a fairy story. But it's not a fairy story. The facts come from the Biological Survey of the Department for broadcast by Station_____.

---ooOoo---

On a stormy December night recently, I was sitting with my friend, Ed Silver, before a bright wood fire--- talking. Mr. Silver knows the great out-of-doors. He knows about furs. He knows about fur farming and the fortunes men have made in furs.

As we talked, the great wind whirred and howled outside and the snow swished against the window panes. I made a good listener and as Silver told his yarn, I thought I saw long processions of men in coonskin caps--- men carrying flintlocks and powder pouches--- marching through my mind. I saw the shades of John Jacob Astor, Jackson and Sublette, Bridger, Ashley, Chouteau, and many others. I saw dogsleds loaded with packs of furs--- pack-horses with furs diamond-hitched to the pack saddles--- men carrying furs on their backs down out of the hills, out of the woods, to the trading posts. I thought of the battles that had been fought for fur-trading rights. I thought of the great romance of the fur business.... Then we jumped a few years.

Silver was saying---

"The early history of fox farming is fraught with frenzied finance. Breeding stock sold for as high as \$34,000 a pair and individual pelts for as much as \$2,700. It reads like a fairy story. The operations of the fox breeders were cloaked in mystery and the public was first sceptical, then gullible.

"In the course of a few years," Silver went on, "stories concerning the wealth to be gotten from the silver-fox business leaked out. And, as the results of the first experiments became known, a fox-farming boom started."

1. The first part of the paper

is devoted to the study of the

properties of the function

which is defined by the

relation $f(x) = \sum_{n=0}^{\infty} a_n x^n$ and the

series

converges for all x in the interval

$(-1, 1)$. The function $f(x)$ is

continuous in the interval

$(-1, 1)$ and has the following

properties: $f(0) = 1$, $f(1) = 2$, $f(-1) = 0$.

Outside, the wind roared about the chimney. In its howling, I thought I could hear the high, ghostly calls of the silver foxes coming out of the snowy woods far away....

But the fur expert was talking and I quit dreaming---

"In this great fox-farming boom," Silver said, "people made fortunes. Three sisters cleared \$25,000 a year out of their venture. A small party of clerks organized a company and made \$40,000 in 4 years. A pup was sold for \$9,000. A shipment of 25 choice skins was sent to London and it brought \$34,175, or an average of \$1,367 a skin. The top price of the choicest pelt in this shipment was \$2,700."

I whistled.

"It's all true," said Silver. "You can find a record of it in Department Bulletin 1151-D, called Silver-Fox Farming. The bulletin is published by the United States Department of Agriculture."

The mention of ways to make money always stirs my imagination. I knew that many people are making money fur-farming today. I resolved to ask Silver about practical details of the business.

"How about this fur-farming business, Silver," I said. "How big a business is it, really?"

"Furs are taken in every State in the Union," Ed said. "The total value of raw furs is at least \$60,000,000 to the trappers every year. Most trappers in the United States today, however, are farm boys. There are half a million of them and they get a big share of that 60 million dollars. But many men and women are trapping furs and raising fur-bearing animals for the market."

"The consumption of furs has been much greater than the production in the United States for many years," Silver continued. "This has naturally brought hundreds of men and women into the business of raising furs for market. Some of these fail--- others succeed. An authority estimates that 2,500 fur farmers in the United States and Alaska have invested between 15 and 18 million dollars in the business. There's probably no branch of animal production that has attracted such widespread attention. Lured by the chances of getting rich, thousands have rushed into the fur-raising business."

Then we got down to fox-farming again. Silver said that a person can raise foxes successfully if he'll study the business and then use a lot of horse sense in following it. Foxes may be raised in captivity if they get the proper food, shelter from the sun, and good care to prevent disease. And when the pelts are taken, there are several very good markets for them. A Government expert says that there is a promising future for fox farmers who follow constructive methods of breeding and caring for the animals.

"But it isn't wise for anyone unfamiliar with fox-raising to start out with a large number of animals," Silver said. "Many troubles come up and

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you can't find the remedies for 'em in books. Just about everything in this game," said Ed, "must be learned by experience. A lot of people who started raising foxes for fur on too large a scale-- or who expanded their business too fast--- failed. It's best to start out with a few pairs of foxes and then gradually increase the number as your knowledge of care and management increases. Quality, not quantity, is the thing that counts in breeding foxes. On a small ranch, the character, disposition, and breeding of individual foxes can be studied intelligently. But the same thing is hard--- if not impossible--- on a large fox ranch.

"You know," continued Silver, "you can't just fence some rough land and then turn loose a bunch of fur-bearing animals and wait for the profits to roll in. But when it's intelligently managed, the production of silver foxes is profitable. A silver-fox pelt, of high quality, taken in the wild, has always been rare. It still is. Today, just about all the silver-fox pelts sold on the raw-fur market are from ranch-raised foxes."

Silver said that a man who intends to start raising foxes for furs should make sure that the animals will thrive in his locality. He said that it's a good idea to locate in a region where other folks are engaged in the business.

"Where can you get breeding stock?" I asked.

"State game commissions often have records of the fur farmers in their States," Silver said, "and these commissions frequently can supply the names and addresses of those having surplus stock. The kinds of animals raised and the prices for stock can then be gotten from the breeders themselves. The U. S. Department of Agriculture raises fur animals for experimental purposes only and doesn't have stock for sale. Neither does the Department issue permits to people who plan to enter the fur-farming business.

"One more thing about the stock," Silver went on. "Breeding stock should be obtained in the Fall. Then, the foxes have time to get used to their new home before the breeding season starts in the Spring. The weather is cold enough by the end of September in fur-farming country to permit the shipment of foxes with safety."

I told Silver that I'd like to try my hand at the business. He said to study it first and recommended Leaflet 27-L, called Recommendations to Beginners in Fur Farming, as a good first lesson. He also said that the Department Bulletin 1151-D, on Silver-Fox Farming, goes into the matter quite completely. Both of these are published by the Department of Agriculture.

Then Silver gave me a few tips. He said that fur animals won't do well under shiftless, careless management. A fur-farmer who hasn't any interest in the welfare of his animals, won't succeed. The farmer should handle his breeding stock so as to get the highest percentage of increase and should be willing to spend part of all of his time looking after the foxes. When he walks through his fur ranch, he should keep his eyes open. He should watch for sick animals, for one thing. He should take note of the living conditions in the pens--- see that they're clean and comfortable. He should see that the

feed is fresh and clean. He shouldn't be misled by what some men say, that fur animals need little or no water. He should supply plenty of fresh water every day.

"A successful fur-farmer," concluded Silver, "sees to every detail of his work with care and efficiency. He leaves nothing undone to promote the health and welfare of his animals. He likes to discuss problems with others who are interested in the same work. He learns of improved methods and then practices them when he can."

" Well, I'm going to look into the proposition, anyhow," I said.

" A \$60,000,000 business is certainly worth looking into," said Silver.

---ooOoo---

ANNOUNCEMENT: That concludes today's OUTDOORS WITH THE SCIENTIST radio chat from the U. S. Department of Agriculture. Copies of the publications mentioned may be secured by writing the Department at Washington, D. C. The publications are Department Bulletin 1151-D, called SILVER-FOX FARMING, and Leaflet 27-L, called RECOMMENDATIONS TO BEGINNERS IN FUR FARMING.

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DEPARTMENT OF CHEMISTRY

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BY

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1955